State of California—Health and Human Services Agency
California Department of Public Health

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DATE: October 24, 2017

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SUB: Review *Draft Radiological Data Evaluation Findings Report For Parcels B and G Soil,* Former Hunters Point Naval Shipyard, San Francisco,CA. Dated September 29, 2017.

As submitted by the California Department of Toxic Substances Control (DTSC), Environmental Management Branch (EMB) of the California Department of Public Health (CDPH) reviewed the *Draft Radiological Data Evaluation Findings Report For Parcels B and G Soil,* Former Hunters Point Naval Shipyard, San Francisco,CA. Dated September 29, 2017.

DTSC requested that EMB review Parcel G Current and Former Building Site survey units (SUs) and Trench Units: 89, 111, 118 and 151, in addition to the main document. This review was performed in support of the Interagency Agreement between DTSC and CDPH.

The Appendix A and C for Parcel B are currently being reviewed by EMB and technical evaluation will be completed by November 3, 2017. If you need further assistance please contact Tracy Jue of my staff at (916) 324-4804 or via email at Tracy.Jue@cdph.ca.gov.

Activity: Review *Draft Data Evaluation Findings Report for Parcels B and G Soil,* Former Hunters Point Naval Shipyard, San Francisco, CA. Dated September 29, 2017.

The Environmental Management Branch (EMB) of the California Department of Public Health (CDPH) appreciates the opportunity to review the submitted document, *"Draft Radiological Data Evaluation Findings Report for Parcels B and G Soil",* Hunters Point Naval Shipyard, San Francisco, CA. Dated September 29, 2017.

General Comments:

1. The Navy has concluded that the "upper range of naturally occurring Ra-226 exceeds the release criteria" as stated on pages 4-2 and 4-34. Please provide scientific justification for this conclusion. Also, explain why Navy has a different conclusion now, during the re-evaluation of the work conducted previously in Parcels B and G.

2. How does the Navy plan to evaluate the trench units filled with fill units that have evidence of potential data manipulation or falsification?

Specific Comments:

1. Section Executive Summary, Page 2, Bullet 2, "Reanalysis of Archived Samples", explain how the Navy will determine whether the soil samples were appropriately collected, and that there is no indication of falsification, through reanalysis of the archived soil samples.

2. Section 1.3, Assumptions and Uncertainties, Page 1-2, Bullet 3, states, "Data quality related to Tetra Tech laboratory analytical methods and procedures were not evaluated". Please explain why the Navy is not evaluating the laboratory analytical methods and quality procedures.

3. Section 2.1, Storm Drain and Sanitary Sewer Line Investigation, page 2-2, Paragraph 3, last sentence states, "At this stage, nearly all radioactive contamination is expected to have been removed. Surveying and sampling the soil above and below the piping was a conservative measure implemented by the Navy". Please explain why the Navy considers this approach "conservative".

4. Section 3, "Data Evaluation Activities", Page 3-1, Primary Radionuclides to Evaluate, Bullet 2, please explain Navy's approach if increased concentrations of Bis-214 is discovered. How will the Navy distinguish between naturally occurring radiological material and radiological contamination?

5. Section 3, Data Evaluations Activities, Page 3-2, Logic Tests, Bullet 2, states, "It is expected that final systematic soil samples would have been collected as a group on the same day, would have been the final set of samples collected, would have been analyzed as a group within 2 working day, would have been the collected before

they were counted by the onsite laboratory, and would have been counted by the onsite laboratory within 2 weeks of sample collection to meet production schedules." EMB noted several Data Evaluation Documentation and Findings forms for Building Sites 317/364/365 that indicates samples were not counted within the two-week timeframe by the offsite lab. EMB is recommending resampling of these survey units. See attached.

6. Section 4.0 , Findings and Recommendations, Page 4-1, last paragraph, EMB does not agree with the statement, "Contamination from leakage or drain line repair should be relatively rare, yet the release criteria for Ra-226 was exceeded many times in soil samples collected from the excavated soil and trench sidewalls. After carefully examining the analytical data and the conceptual site model for soil contamination, it is concluded that the upper range of naturally occurring Ra-226 exceeds the release criteria. Therefore cleanup will be hampered without an understanding that naturally occurring Ra-226 may exceed the release criterion being indicative of contamination." This statement does not correlate with the conceptual site model described in Section 2.1 "Storm Drain and Sanitary Sewer Line Investigation". Please clarify.

7. Parcel G Trench Units 89, 111, 118 and 151: For Trench 151, there is a gap of two years between commencement of excavation (11/28/2007) and concurrence on backfilling (12/14/2009). Please explain.